

Work Order ID 141012-2

141012

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Tuesday, January 26, 2016 3:18:24 PM

Item ID: D2893-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Support
 Start Date: 1/26/2016 Start Qty: 20.00 *20* 18
 Required Date: 1/26/2016 Req'd Qty: 20.00 *20* 18
 Reference: Cust Item ID:
 Customer:

Approvals: Process Plan: MLJ Date: JAN 28 2016 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2893	C								
100	HAAS CNC VERTICAL MACHINING #1	0.01							
100									
HAAS I	Memo	0.17							
HAAS CNC vertical machine #1	1-Machine as per Folio FA081 2-Debur								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00							
120									
QC	Memo	0.01							
Quality Control									

12 0 16/02/03 16/02/05
 12 0 16/02/03 16/02/05
 12 0 16/02/03 16/02/05
 DAS 20 9-80 16-02-05

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 141012

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Item ID: D2893-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Support
 Start Date: 1/26/2016 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 1/26/2016 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* HandFXtube	Memo Per note 8 on page 1 of dwg D2893, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg. 24h of cure time.	0.00 0.00				12			DAS 41 9-89 16-2-5
140 *140* QC	QC3- Inspect Part Finish Memo	0.00 0.00				(12)			DAS 38 9-89 FEB 08 2016
170 *170* Packaging	Identify as per dwg & Stock Location: LG50 Memo LOCATION : LG050	0.00 0.00				12			DAS 41 9-89 16-2-8

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. _____		Rework ☐	☐	Skid-tube ☐	☐	Cross tube ☐	☐	Water Jet ☐	Engineering ☐
NCR No. _____		Scrap ☐	☐	Machining ☐	☐	Small Fab ☐	☐	Prod. Eng. Coord. ☐	Quality ☐
		Use-as-is ☐	☐	Thermoforming ☐	☐	Finishing ☐	☐	Rec/Store/Packaging ☐	Other ☐
		Suspected Unapproved ☐	☐	Large Fab ☐	☐	Composite ☐	☐	Supplier ☐	☐
Date: _____		Step #: _____		QTY Effective: _____				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER: _____							

Work Order ID 141012

141012

Page 3

Tuesday, January 26, 2016 3:18:24 PM

Item ID: D2893-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Support

Start Date: 1/26/2016

Start Qty: 20.00

20

Cust Item ID:

Required Date: 1/26/2016

Req'd Qty: 20.00

20

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.03

Quality Control

MCS

FEB 08 2016

MCS

FEB 08 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

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Work Order ID: 141012

141012

Parent Item: D2893-1

D2893-1

Parent Item Name: Support

Start Date: 1/26/2016

Required Date: 1/26/2016

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP: C02.11.26Reformat; Added P/OKJ
 IPP D 06.04.19 removed alodine EC
 IPP Rev:E Added priming as per Rev B 07-04-30 JLM
 IPP F 08.03.19 Re-format EC verified by: DD
 IPP Rev:G 08-05-15 add QC14 DD verified by:EC
 11.08.04 as per dwg rev.C DD verf:EC
 IPP Rev:H

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK078		Manufactured	No			100	Each	7.0000	0.5	10.52632			

DSK078

D2893-1 Turning Detail

**

16/01/02

Location	Loc Qty	Loc Code
MAT060	7	
136575	1	
138984	6	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____		DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part No. _____		Rework ☐		Skid-tube ☐		Cross tube ☐		Water Jet ☐		Engineering ☐	
NCR No. _____		Scrap ☐		Machining ☐		Small Fab ☐		Prod. Eng. Coord. ☐		Quality ☐	
		Use-as-is ☐		Thermoforming ☐		Finishing ☐		Rec/Store/Packaging ☐		Other ☐	
		Suspected Unapproved ☐		Large Fab ☐		Composite ☐		Supplier ☐			
Date: _____		Step #: _____		QTY Effective: _____				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition							
								Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐				Pressure/Forced ☐ Temperature/Cure ☐ Bending ☐ Set-up ☐ Centre Not Concentric ☐ BOM/Route ☐ Cracks ☐ Broken/Damage/Defect ☐ Crimp/Kink/Ripple/Wave ☐ Inspection Incomplete/Unqualified ☐ Cuffs ☐ Contamination ☐ Crushing ☐ Countersink ☐ Heat Treat ☐ Cut Too Short ☐ Wave/Twist in Tube ☐ Instructions Incomplete/Unclear ☐ Marks/Chatter ☐ Drill Holes ☐							
OTHER: _____				Power Loss/Surge ☐ Positioned Wrong ☐ Folio/Program ☐ Outside Dimensions ☐ Grain ☐ Over/Under tolerance ☐ Weld ☐ Part Incorrect ☐ Wrong Stock Pulled ☐ Part Lost/Missing ☐ Out of Sequence ☐ Part Moved ☐ Off-set ☐ Drawing ☐ Misabeled ☐ Finish ☐ Fit/Function ☐ Misread ☐ Misaligned/off center ☐ Turning Sequence ☐							

DART AEROSPACE LTD		Work Order: 141012
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.997	2.997	2.999	2.999	2.998
AB	0.440	0.460		0.440	0.440	0.440	0.450	0.450
AC	0.125	0.160		0.150	0.148	0.148	0.150	0.150
AD	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AE	0.188	0.193		0.189	0.187	0.187	0.189	0.189
AF	0.125	0.160		0.150	0.150	0.150	0.145	0.150
AG	0.140	0.160		0.150	0.148	0.146	0.145	0.145
AH	1.360	1.400		1.382	1.382	1.377	1.379	1.373
AI	0.040	0.060		0.053	0.0506	0.050	0.050	0.047
AJ	1.190	1.230		1.218	1.217	1.217	1.218	1.212
AK	0.010	0.020		0.015	0.015	0.015	0.015	0.015
AL	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AM	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AN	2.518	2.538		2.525	2.525	2.525	2.525	2.525
AO	84.39	90.39		87.390	87.390	87.390	87.390	87.390
AP	0.261	0.266		0.261	0.261	0.261	0.261	0.262
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR								
AS								
AT								
Accept/Reject				✓	✓	✓	✓	✓

Measured by: <i>[Signature]</i>	Date: 11/02/22
Audited by: DAS 20 9-89	Date: 16-02-05
Preliminary Approval:	Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	<i>[Signature]</i>

DART AEROSPACE LTD		Work Order:	141012
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	27	38	49	510
HAAS Section								
AA	2.985	3.005		2.999	2.999	2.999	2.995	2.999
AB	0.440	0.460		0.450	0.450	0.450	0.450	0.450
AC	0.125	0.160		0.150	0.150	0.150	0.150	0.150
AD	0.040	0.060		0.050	0.050	0.050	0.050	0.050
AE	0.188	0.193		0.189	0.189	0.189	0.189	0.189
AF	0.125	0.160		0.150	0.150	0.150	0.150	0.150
AG	0.140	0.160		0.145	0.147	0.147	0.146	0.146
AH	1.360	1.400		1.371	1.380	1.380	1.380	1.375
AI	0.040	0.060		0.049	0.049	0.050	0.047	0.046
AJ	1.190	1.230		1.210	1.219	1.219	1.218	1.218
AK	0.010	0.020		0.015	0.015	0.015	0.015	0.015
AL	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AM	0.240	0.260		0.250	0.250	0.250	0.250	0.250
AN	2.518	2.538		2.525	2.525	2.525	2.525	2.525
AO	84.39	90.39		87.390	87.390	87.390	87.390	87.390
AP	0.261	0.266		0.262	0.262	0.262	0.262	0.262
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063
AR								
AS								
AT								
Accept/Reject				✓	✓	✓	✓	✓

Measured by:	<i>[Signature]</i> DAC	Date:	14/02/03
Audited by:	29 0-80	Date:	16-02-05
Preliminary Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	<i>[Signature]</i>

DART AEROSPACE LTD		Work Order:	141012
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1/	1 2	1 3	1 4	1 5
HAAS Section								
AA	2.985	3.005		2.997	2.999		2.997	
AB	0.440	0.460		.450	.450	.450	.450	
AC	0.125	0.160		.150	.150	.150	.150	
AD	0.040	0.060		.050	.050	.050	.050	
AE	0.188	0.193		.189	.189	.189	.189	
AF	0.125	0.160		.150	.150	.150	.150	
AG	0.140	0.160		.148	.148	.14	.149	
AH	1.360	1.400		1.372	1.368		1.373	
AI	0.040	0.060		.052	.049	.054	.051	
AJ	1.190	1.230		1.215	1.210		1.215	
AK	0.010	0.020		.015	.015	.015	.015	
AL	0.053	0.073		.063	.063	.063	.063	
AM	0.240	0.260		.250	.250	.250	.250	
AN	2.518	2.538		2.525	2.525	2.525	2.525	
AO	84.39	90.39		87.39	87.39	87.39	87.39	
AP	0.261	0.266		.262	.262	.262	.262	
AQ	0.053	0.073		.063	.063	.063	.063	
AR								
AS								
AT								
Accept/Reject								

Measured by:	<i>ml</i> DAS	Date:	1/6/02/05
Audited by:	20 9-89	Date:	16-02-05
Preliminary Approval:		Date:	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
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